

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Applicant : Broadcom Corporation
 For : Reissue of U.S. Patent No. 5,604,741
 Issued : February 18, 1997
 Title : ETHERNET SYSTEM

Application No. : 08/398,759
 Filed : March 16, 1995

Docket No. : 34176/JWE/B600

REISSUE DECLARATION AND POWER OF ATTORNEY

BOX REISSUE
 Assistant Commissioner for Patents
 Washington, D.C. 20231

P.O. Box 7068
 Pasadena, Ca. 91109-7068
 February 18, 1999

Commissioner:

We, Henry Samueli, Mark Berman and Fang Lu, the below named inventors, hereby declare and state as follows:

1. Our respective Post Office address and citizenship are as stated below next to our respective names.
2. We believe that we are the original and first inventors of the subject matter which is described and claimed in original Letters Patent No. 5,604,741 (the '741 patent") and in the accompanying reissue specification and claims for which invention we request a reissue patent.
3. We have reviewed and understand the contents of the above-identified specification including the claims as amended by the amendment referred to below.
4. We acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

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Application No. Reissue of U.S. Patent No. 5,604,741

5. We believe that the original U.S. Patent No. 5,604,741 which issued on our Application No. 08/398,759 is partly "inoperative" by reason of having claimed less than we had a right to claim in the original Letters Patent.
6. The error arose in failure to present claims having the scope and language of new claims 104-144 presented in the attached reissue application, in that the communication system processes communication signals in a novel fashion disclosed in the specification, and is usable in a general multi-pair communication environment not necessarily including a computer and a hub.
7. The error was discovered in late 1998 as plans evolved for the production of new designs. At that time, U.S. Patent No. 5,604,741 was reviewed in conjunction with the new designs and it was realized that one important embodiment of the invention was the use of digital equalization in a multi-pair communication environment, as set forth in the specification, and that the patent claimed less than we had a right to claim. In addition, error arose in that we did not appreciate the nature and scope of claims which could have been presented in our original application, and since we are inexperienced with United States patent laws, we did not appreciate that the claims may not have included subject matter to which we were entitled. It is now our belief that we are entitled to a scope of protection defined by claims 104-144 which were not presented in the original application.
8. We are informed and believe that the present newly added claims are to the same invention and of a scope which could have been made in our application which matured into the '741 patent. We are informed and believe that the conclusions reached about the errors with respect to claims 104-144, not having been

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presented in the application, occurred as aforesaid after our patent issued, are correct.

9. More specifically, the claims in the issued '741 patent are insufficient in failing to claim all that we that are entitled to claim for the following reasons:

a. Claims 1-103 of the '741 are all apparatus claims calling for a system including at least a hub and a computer. The patent specification describes the invention as a system for and method of digitally processing communication signals in a multi-pair communication environment. In the summary of the invention (column 2, lines 2-45) the invention is described as comprising a digital adaptive equalizer of an advanced design which includes feedback techniques adapted to enhance the resolution provided by the equalizer in determining the amplitude levels of digital signals in a communications packet. The invention also includes circuits and techniques for extracting timing information from a received communication signal. The circuits and techniques to not depend upon the presence of either a hub or a computer for their novelty.

b. Newly added claims 104-129 are method claims directed to the techniques used to process communication signals and newly added claims 130-144 are directed to a bidirectional communication system not limited to one including a computer and hub.

10. The errors specified herein occurred without any deceptive intent on the part of the undersigned applicants.

11. The reissue claims as presented herein are our invention as described in the original Letters Patent.

Application No. Reissue of U.S. Patent No. 5,604,741

Applicants further appoint:

R. W. Johnston	(17,968)	Vincent G. Gioia	(19,959)	Kathleen M. Olster	(42,052)
D. Bruce Prout	(20,958)	Edward R. Schwartz	(31,135)	Daniel M. Cavanagh	(41,661)
Hayden A. Carney	(22,653)	John D. Carpenter	(34,133)	Molly A. Holman	(40,022)
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LeRoy T. Rahn	(20,356)	Grant T. Langton	(39,739)	Joel A. Kauth	(41,886)
Richard D. Seibel	(22,134)	Constantine Marantidis	(39,759)	Patrick Y. Ikehara	(42,681)
Walter G. Maxwell	(25,355)	John W. Eldredge	(37,613)	Mark Garscia	(31,953)
William P. Christie	(29,371)	Gregory S. Lampert	(35,581)	Gary J. Nelson	(P-44,257)
David A. Dillard	(30,831)	Craig A. Gelfound	(41,032)	Raymond R. Tabandeh	(P-43,945)
Thomas J. Daly	(32,213)	Syed A. Hasan	(41,057)	Phuong-Quan Hoang	(41,839)

doing business as the law firm CHRISTIE, PARKER & HALE, LLP, telephone 626/795-9900, as principal attorneys with power to appoint associate attorneys, to prosecute this application and any subsequent application based on the disclosure of this application, and to transact all business in the Patent and Trademark Office connected with this application and any subsequent application.

The authority under this Power of Attorney of each person named above shall automatically terminate and be revoked upon such person ceasing to be a member or associate of or of counsel to that law firm.

Please address all correspondence to CHRISTIE, PARKER & HALE, LLP, P.O. Box 7068, Pasadena, California 91109-7068.

We declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Application No. Reissue of U.S. Patent No. 5,604,741

Full Name of First

Inventor : Henry Samueli

Inventor's Signature : _____

Residence Address : 30926 Steeplechase

San Juan Capistrano, CA 92675

Citizenship : USA

Full Name of Second

Inventor : Mark Berman

Inventor's Signature : _____

Residence Address : 12861 Mackenzie Dr.

Tustin, California 92782

Citizenship : USA

Full Name of Third

Inventor : Fang Lu

Inventor's Signature : _____

Residence Address : 25 Arbusto

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Citizenship : Taiwan R.O.C.

JWE/mg

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Applicant : Broadcom Corporation
For : Reissue of U.S. Patent No. 5,604,741
Issued : February 18, 1997
Title : ETHERNET SYSTEM

Application No. : 08/398,759
Filed : March 16, 1995

Docket No. : 34176/JWE/B600

**ASSIGNEE'S ASSENT, STATEMENT OF OWNERSHIP
UNDER 37 CFR § 3.73(b) AND OFFER TO SURRENDER**

BOX REISSUE
Assistant Commissioner for Patents
Washington, D.C. 20231

P.O. Box 7068
Pasadena, Ca. 91109-7068
February 18, 1999

Commissioner:

Broadcom Corporation, a California corporation having a place of business at 16215 Alton Parkway, Irvine, California 92618, represents that it is the assignee of the entire interest in U.S. Patent No. 5,604,741, issued February 18, 1997, and entitled ETHERNET SYSTEM by virtue of an assignment recorded at reel 7369, frame 0419. Assignee hereby assents to the Application for Reissue of this patent for the same invention on the accompanying amended specification and claims.

Assignee hereby offers to surrender the original Letters Patent No. 5,604,741.

With this request is filed an order for title report, as required in such applications.

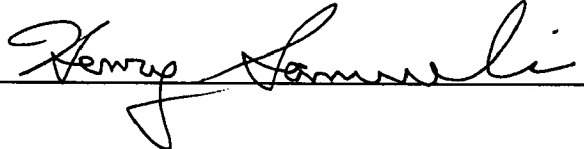
I declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements and the like, so made, are

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punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001, and further that such willful false statements may jeopardize the validity of the application and any patent issuing thereon.

BROADCOM CORPORATION

Date 2-18-99

By 

Henry Samueli
(Name)

Co-Chairman of the Board,
Chief Technical Officer
(Title)

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Docket No.

: 04176/JWE/B600

CHRISTIE, PARKER & HALE, LLP

Post Office Box 7068

Pasadena, CA 91109-7068

(626) 795-9900

Applicant or Patentee : BROADCOM CORPORATION

Application or Patent No. : Reissue of U.S. Patent No. 5,604,741

Issued : February 18, 1997

Entitled : ETHERNET SYSTEM

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS
(37) CFR 1.9(f) & 1.27(c) - SMALL BUSINESS CONCERN**

I hereby declare that I am

_____ the owner of the small business concern identified below:

X an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF SMALL BUSINESS CONCERN : BROADCOM CORPORATION

ADDRESS OF SMALL BUSINESS CONCERN: 16215 Alton Parkway, Irvine, California, 92618

I hereby declare that the above identified small business concern qualifies as a small business concern as defined in 13 CFR 121.12, and reproduced in 37 CFR 1.9(d), for the purposes of paying reduced fees to the United States Patent and Trademark Office, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention entitled ETHERNET SYSTEM by inventor(s) Henry Samueli, Mark Berman and Fang Lu described in

X the specification filed herewith

_____ Application No. ___ filed ___

_____ Patent No. ___ issued ___

If the rights held by the above identified small business concern are not exclusive, each individual, concern or organization having rights in the invention is listed below* and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d), or a nonprofit organization under 37 CFR 1.9(e). *NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

NAME :

ADDRESS :

___ INDIVIDUAL

___ SMALL BUSINESS CONCERN

___ NONPROFIT ORGANIZATION

NAME :

ADDRESS :

___ INDIVIDUAL

___ SMALL BUSINESS CONCERN

___ NONPROFIT ORGANIZATION

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS
(37) CFR 1.9(f) & 1.27(c) - SMALL BUSINESS CONCERN

Docket No.: 34176/JWE/B600

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING : Henry Samueli
TITLE OF PERSON IF OTHER THAN OWNER : Co-Chairman of the Board, Chief Technical Officer
ADDRESS OF PERSON SIGNING : 16215 Alton Parkway, Irvine, California 92618

SIGNATURE Henry Samueli DATE 2-18-99

JWE/mg

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